

CLAIMS

The following is a listing of all claims within the national stage application, and the Applicants respectfully request amendment of the claims as shown:

1. (Currently Amended) A detection system (1), comprising:
 - an optical sensor (3);
 - a radar device (2); and
 - a signal processor (4) communicatively connected with the optical sensor and the radar device, the signal processor comprising:
 - a first detector (41, 410-413) for detecting a first object on the basis of a first signal coming from the optical sensor and determining at least one first property of the first object;
 - a second detector (42, 420-421) for detecting a second object on the basis of a second signal coming from the radar device and determining at least one second property of that second object, and
 - a signaling unit (43) for producing a signal if the at least one first property and the at least one second property satisfy a predetermined condition;
 - a first distance determinator configured to determine from the first signal a first distance between the first object and the optical sensor;
 - a second distance determinator configured to determine from the second signal a second distance between the second object and the radar device; and
 - said signaling unit produces a signal if the difference between the first and second distances satisfies a predetermined condition.

2. (Currently Amended) A detection system (1) according to claim 1, wherein the signaling unit further produces ~~signaling means produce~~ a signal if the first object and the second object correspond to each other to a sufficient extent.

3. (Canceled).

4. (Currently Amended) A detection system (1) according to claim 31, wherein the signal processor (4) further comprises:

an angle calculating means~~device~~ (411, 412) configured to determine ~~for determining~~ from the first signal the distance from the first object to the optical sensor (3) with the aid of an elevation angle and an azimuth angle of the detected object relative to the optical sensor (3).

5. (Currently Amended) A detection system (1) according to claim 31, wherein the signal processor (4) further comprises:

~~distance signaling means for producing~~ a further distance determinator ~~configured to produce~~ a distance signal if the first and second distances correspond to each other to at least a predetermined extent, which distance signal represents the distance determined from the second signal.

6. (Currently Amended) A detection system (1) according to claim 1, wherein the signal processor (4) further comprises:

~~means for producing~~ a signal producer device ~~configured to produce~~ a signal if the first object and the second object correspond to each other to at least a predetermined extent, and the second object, on the basis of information derived from the second signal, is situated on the surface of the earth.

7. (Previously Presented) A detection system (1) according to claim 1, wherein:

the optical sensor (3) has an optical field of regard; and

the radar device (2) has a radar field of regard, which fields of regard overlap each other wholly or partly.

8. (Original) A detection system (1) according to claim 7, wherein the viewing direction of the optical sensor (3) and the viewing direction of the radar device (2) are substantially parallel.

9. (Previously Presented) A detection system (1) according to claim 1, wherein the optical sensor (3) and the radar device (2) are arranged in mutual proximity.

10. (Original) A detection system (1) according to claim 9, wherein the radar device (2) comprises a dish antenna (22) with a feedhorn (21), and the optical sensor (3) is mounted on or near the feedhorn.

11. (Currently Amended) A detection system (1) according to claim 1, wherein the optical sensor (3) and the radar device (2) are pivotably arranged and wherein the detection system further comprises a driving device configured to cause driving means are provided for causing the optical sensor and the radar device to pivot or rotate.

12. (Currently Amended) A detection system (1) according to claim 1, wherein in the signal path between the optical sensor (3) and the signal processor (4), and in the signal path between the radar device (2) and the signal processor, substantially the same time delay is present.

13. (Previously Presented) A detection system (1) according to claim 1, wherein the optical sensor comprises a camera (3).

14. (Currently Amended) A method for detecting objects, comprising:
generating (100) a sensor signal with an optical sensor;

detecting (101) a first object on the basis of the sensor signal, the detecting of the first object comprising determining from the sensor signal a distance between the first object and the optical sensor;

generating (200) a radar signal;

detecting (201) a second object on the basis of the radar signal, the detecting of the second object comprising a determining from the radar signal a distance between the second object and the radar device; and

producing (300) a detection signal if both on the basis of the sensor signal and on the basis of the radar signal the same object is detected, wherein the producing of the detection signal comprises the producing of a distance signal if the distance between the distance determined from the distance signal and the distance determined from the first signal satisfies a predetermined condition.

15. (Original) A method according to claim 14, wherein producing (300) a detection signal comprises:

producing a detection signal if the first object and the second object correspond to each other at least to a predetermined extent.

16. (Canceled).

17. (Currently Amended) A method according to claim ~~14~~16, wherein determining from the first signal a distance between the first object and the optical sensor comprises:

determining from the first signal the distance from the first object to the optical sensor (3) with the aid of an elevation angle and an azimuth angle of the detected object relative to the optical sensor (3).

18. (Currently Amended) A method according to claim ~~14~~ 16, wherein producing

(300) a detection signal comprises:

producing a distance signal if the two distances correspond to each other at least to a predetermined extent, which distance signal represents the distance determined from the second signal.

19. (Previously Presented) A method according to claim 14, wherein producing (300) a detection signal comprises:

producing a detection signal if the first object and the second object correspond to each other at least to a predetermined extent and the second object, on the basis of information derived from the second signal, is situated on the surface of the earth.

20. (Previously Presented) A method according to claim 14, wherein the optical sensor (3) has an optical field of regard and the radar device (2) has a radar field of regard, which fields of regard overlap each other wholly or largely.

21. (Original) A method according to claim 20, wherein the viewing direction of the optical sensor (3) and the viewing direction of the radar device (2) are held substantially parallel.

22. (Previously Presented) A method according to claim 14, wherein the optical sensor (3) and the radar device (2) are used whilst arranged in mutual proximity.

23. (Original) A method according to claim 22, wherein the radar device (2) comprises a dish antenna (22) with a feedhorn (21), and the optical sensor (3) is arranged on or near the feedhorn.

24. (Previously Presented) A method according to claim 14, wherein the optical sensor (3) and the radar device (2) are pivoted.

25. (Previously Presented) A method according to claim 14, wherein between generating (100) a sensor signal and detecting (101) a first object, and between generating (200) a radar signal and detecting (201) a second object, the same period of time elapses.

26. (Previously Presented) A method according to claim 14, wherein an optical sensor is used which comprises a camera (3).

27. (Currently Amended) A method according to claim 14, wherein the steps of the method are performed using a computer program comprising program code loaded into a programmable device.~~A computer program comprising program code for performing one or more steps of a method according to claim 14 when the program has been loaded into a programmable device.~~

28. (Currently Amended) A method according to claim 27, wherein the method uses a data carrier provided with data representing the computer program.~~A data carrier provided with data representing a computer program according to claim 27.~~